

ABSTRACT

A method for regulating the current through an electromagnetic actuator. The actuator, a first switch and a current-measuring circuit form a series circuit. A free-wheeling diode is parallel-connected to the actuator. The first switch is closed and opened by a control and a pulse generator using a PWM signal (PWM = pulse width modulation) in such a way that the current flowing through the actuator and measured by the current-measuring circuit is regulated to a setpoint value (SW). The time duration of one on and off switching cycle of the PWM signal is altered, and a so-called dither function in the form of a low-frequency oscillation is superimposed on the PWM signal.